EXHIBIT 6

EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

STC.UNM, Plaintiff, v. SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG SEMICONDUCTOR, INC., and SAMSUNG AUSTIN SEMICONDUCTOR, LLC, Defendants.	Case No. 6:19-cv-329-ADA

DECLARATION OF JEFFREY BOKOR, PH.D.
IN SUPPORT OF
SAMSUNG'S OPENING CLAIM CONSTRUCTION BRIEF

I, Jeffrey Bokor, hereby declare, affirm and state the following:

1. The facts set forth below are known to me personally and I have firsthand knowledge of them.

2. I make this Declaration in support of Samsung's Opening Claim Construction Brief in this action.

3. A copy of my CV as well as a listing of cases in which I have testified as an expert at trial or by deposition in the last four years is attached as Exhibit A to this Declaration.

4. I am being compensated at the rate of $600 per hour for my work in connection with this action. My compensation in this action is not dependent in any way on the contents of this Declaration, the substance of any further opinions or testimony that I may provide, or the ultimate outcome of this action.

5. I received a B.S. degree in Electrical Engineering from the Massachusetts Institute of Technology in 1975, an M.S. degree in Electrical Engineering from Stanford University in 1976, and a Ph.D. degree in Electrical Engineering from Stanford University in 1980.

6. From 1980 until 1992, I was employed at AT&T Bell Laboratories, where I worked on laser physics, optoelectronics, semiconductor physics, and integrated circuit technology, among other topics. In particular, I worked on semiconductor surface and interface physics, advanced lithography for integrated circuits, and silicon metal-oxide-semiconductor field-effect transistor (MOSFET) device design and fabrication technology.

7. In 1992, I joined the faculty of the department of Electrical Engineering and Computer Sciences (EECS) at the University of California at Berkeley (UCB) as a Professor, with a joint appointment as a Faculty Scientist at the Lawrence Berkeley National Laboratory (LBNL). In 2008, I was appointed as a Senior Faculty Scientist at LBNL, and I continue to hold that title. I

also currently hold the Paul Gray Distinguished Professorship (an endowed Chair) in Engineering at UCB. From 2012-2017, I served as Associate Dean for Research in the College of Engineering at UCB. In 2017, I was appointed as Chair of the Electrical Engineering Division in the EECS Department at UCB, and Associate Chair of the Department. In July 2019, I was appointed as Chair of the EECS Department, and I continue to serve in this capacity.

8. Since joining the EECS Department at UCB, I have continued to do research on silicon integrated circuit technologies, including MOSFET transistor design, and complementary metal-oxide-semiconductor (CMOS) fabrication process technology. In particular, during the late 1990's and early 2000's I worked and published extensively on FinFET technology.

9. At UCB, I have taught classes at both the undergraduate and graduate level in optics, lasers, semiconductor physics and devices, and semiconductor process technology.

10. I have been elected Fellow of the Institute for Electrical and Electronic Engineers (IEEE), the American Physical Society (APS), and the Optical Society of America (OSA). During my career, I have served on numerous Program Committees, Scientific Advisory Committees, and Technical Advisory Boards. I have served as Chair or Co-Chair of numerous technical conferences. I have published over 330 articles in the scientific and technical literature and have been awarded 12 patents in the areas of electronic devices and nanofabrication technologies.

11. In all, I have over 30 years of experience working and teaching in the field of semiconductor device design and engineering, micro- and nano-fabrication, and CMOS process technology.

12. I have reviewed the U.S. Patent No. 9,142,400 ("the '400 patent") and its file history.

13. I have been informed and understand that the plain and ordinary meaning, if any, for a claim term in a patent is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.

14. I am informed and understand that the relevant period for the ’400 patent may range from around the provisional filing date of July 17, 2012 to around the non-provisional filing date of July 17, 2013

15. It is my opinion based upon a review of the patent file histories that a person of ordinary skill in the art (“POSITA”) during this period would have had a master’s degree or higher in material science, physics, electrical engineering, or related disciplines, and three to four years of experience in the design and fabrication of field effect transistors (FETs). More education can supplement practical experience and vice versa. I was one of at least ordinary skill in the art during this period.

16. I have been asked for my opinion regarding the meaning of certain claim terms appearing in the claims of the ’400 patent. My opinion is based on my experience as one of at least ordinary skill in the field of the ’400 patent during the relevant period, my experience interacting with others of ordinary skill in the art during this time, as well as contemporaneous literature during this time.

“heteroepitaxial layer”

17. I am informed and understand that Samsung proposes the proper construction for the term “heteroepitaxial layer” is “an epitaxially grown crystalline layer of material different from the crystalline material on which it is grown.” STC’s proposed construction is “the layer of material, different from the material of the seed area, that has been grown such that its atoms line up as if they are a continuation of the starting crystal structure of the seed area material.” For the

reasons set forth below, it is my opinion that Samsung's proposed construction is consistent with how a POSITA would understand this term, whereas STC's proposed construction would be unduly narrow and inconsistent with its customary meaning to a POSITA.

18. Heteroepitaxial layer is a term of art within the field of material science, physics, electrical engineering, and other related disciplines related to the fabrication of semiconductor devices. The Web of Science database of scientific journal publications from the year 2012 or earlier shows over 310 publications with the terms "heteroepitaxy" or "heteroepitaxial" in the title and over 800 publications with one or both of those terms appearing somewhere within the text of the publication.

19. Heteroepitaxial growth is one form of epitaxial growth, with homoepitaxial growth being another. The two forms share many similarities, with one key difference being that heteroepitaxial growth refers to the growth of a layer of one crystalline material (the epitaxial layer) that is a ***different*** material than the underlying crystalline material (*e.g.*, the substrate) on which it is grown (indicated by the prefix "hetero"), while homoepitaxial growth refers to the growth of the ***same*** crystalline material (indicated by the prefix "homo"). *See e.g.,* Exhibit 2, US2008/0303033, at para 24 ("When the crystals grown are the same of [sic] those of the substrate, the growth is 'homoepitaxial' and when the crystals grown are different from those of the substrate, the growth is 'heteroepitaxial.'").

20. The ***crystalline*** property of the materials is important for epitaxial growth, because there is a distinct relationship between the crystalline structures of the two materials in epitaxial growth. This is in contrast to a more general process of depositing a layer of one material on another, where the deposited material may be non-crystalline (or amorphous), or otherwise lack

such a relationship between the respective crystal structures. A POSITA would not consider growing a non-crystalline layer of material to be heteroepitaxial growth.

21. One way to conceptualize why there is a relationship between the crystalline structures is to consider the atoms at the surface of the substrate material. Unlike the atoms within the interior where each atom is bonded to neighboring atoms on all sides (in accordance with the atomic structure of the element), the surface atoms have "dangling bonds" that effectively serve as bonding sites that attract the next layer of atoms. Materials grown by epitaxy are guided by this "template" at the exposed surface of the material, and the new material must have a crystal structure that is compatible with the template. Growing an incompatible material on the template is possible, but it will produce a layer that lacks the relationship between the respective crystal structures, and would ordinarily not be considered an epitaxially grown layer of material by a POSITA.

22. Whether or not the deposited layer can be epitaxially grown on the substrate depends on the material properties of the two respective materials, including the respective crystal structures. For a homoepitaxial layer, because the growth material is the same as the underlying material, all the material properties (including the crystal structures) of the two are likewise the same. Therefore, in homoepitaxial growth, the new atoms can "line up as if they are a continuation of the starting crystal structure of the seed area material" with the new layer taking on the same crystal structure, preserving the same symmetry properties of the original crystal structure.

23. For heteroepitaxial growth, because the layers of material are different, this "continuation of the starting crystal structure" may not necessarily be true, and depends on the crystal structure of the two respective materials. For example, if germanium (having a diamond cubic crystal structure) is epitaxially grown on silicon (also having a diamond cubic crystal

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structure), the resulting heteroepitaxial layer of germanium would have atoms that "line up as if they are a continuation of the starting crystal structure of the seed area material." In this case, the same crystal structure is preserved (*i.e.,* continued), and the epitaxially grown germanium atoms will be aligned in accordance with the diamond cubic crystal structure (*i.e.*, the same crystal structure as in the silicon). Such a heteroepitaxial layer with the same crystal structure is an example of what the '400 patent refers to as a grown film that has the same symmetry as the seed area material. '400 patent at 6:19-25. As is known in the art, a given crystal structure can be defined by the set of symmetry properties (or "symmetry group"), and therefore, two identical crystal structures necessarily share the same symmetry group.

24. On the other hand, it is possible for heteroepitaxial growth to occur where the grown atoms ***do not*** "line up as if they are a continuation of the starting crystal structure of the seed area material." This would occur if the two different layers of material have ***different*** crystal structures. In this case, the original crystal symmetry is ***broken*** at the interface where the new material is grown, where there is an abrupt change to the crystal structure and where the atoms are located in space. Therefore, the atoms do not "line up as if they are a continuation of the starting crystal structure of the seed area material."

25. Well-known examples of such heteroepitaxial layers in the art include materials with hexagonal crystal structure epitaxially grown on materials with cubic crystal structures and vice versa. *See e.g.,*

- Exhibit 3, US 6,083,812 at 4:4-8 (disclosing "heteroepitaxy of (001) Si on the rhombahedral [sic] plane of sapphire in which a ***cubic*** semiconductor heteroepitaxially grows on a ***hexagonal*** substrate") (emphasis added). Here,

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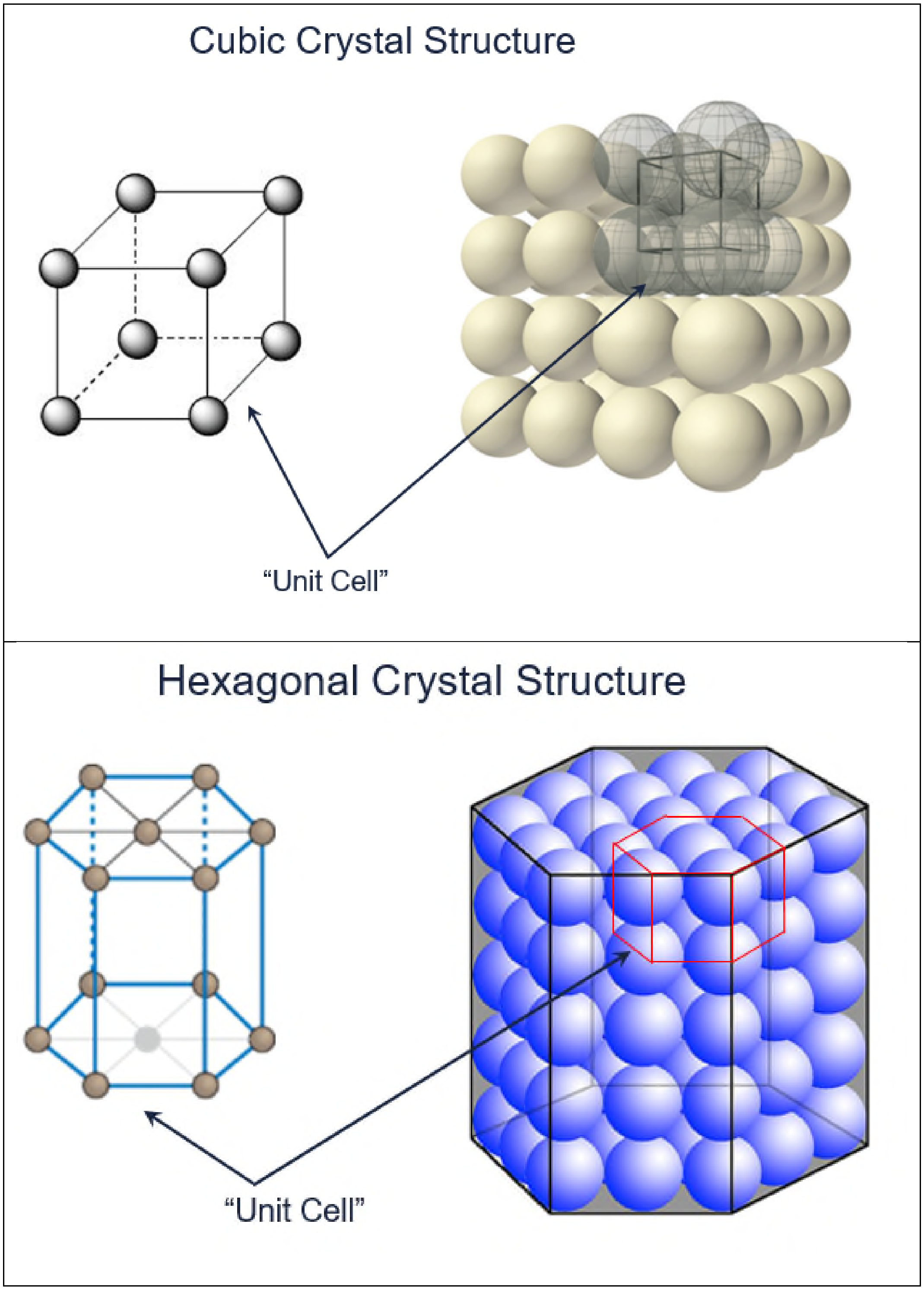
silicon ("Si") has a diamond cubic crystal structure, and sapphire has a hexagonal crystal structure.

- Exhibit 4, US 8,324,660 at 15:3-9 (disclosing growth of "hexagonal semiconductors such as III-nitrides on Si … [where] Si is a cubic crystal); 15:31-58 (describing the growth of hexagonal materials on the (111) surface of a cubic silicon substrate, and referring to the region of such growth as "heteroepitaxial region," noting that "if small areas of hexagonal semiconductor material are desired for device active areas, the heteroepitaxial overgrowth regions expanding from the individual openings can be planarized"); *see also id.* at Figs. 5A and 5B showing heteroepitaxial growth of hexagonal crystalline material on the silicon (cubic) substrate.
- Exhibit 5, US 2011/0147791 at para 0046 ("***Heteroepitaxy*** is a kind of epitaxy performed with ***materials that are different from each other***") (emphases added); para 0065 (disclosing "a ***hexagonal crystal*** semiconductor layer may be grown on the {111} plane of a ***face centered cubic substrate***") (emphases added); para 0102 (disclosing "growing {0001} wurtzite [a form of hexagonal crystal structure] InGaN alloys … on the {111} plane of a cubic crystal…").

26. In these examples, the heteroepitaxial layers have a new and ***different*** crystal structure than the material on which it is grown (e.g., the substrate). Importantly, this means that the crystal structure symmetry is different between the deposited material and the substrate material, and the relative position of the atoms within the crystal structure are likewise different. This is illustrated in the three-dimensional perspective views of exemplary cubic and hexagonal crystal structures below.



27. The left side of the figures above show the respective "unit cells" of a simple cubic crystal structure (top) and a hexagonal crystal structure (bottom). A unit cell is the smallest structure that has the same symmetry properties as the full crystal, and the unit cell is repeated

throughout the crystal structure. The repeating of the unit cell means the atoms “line up” at positions in space consistent with the repeating unit cell (as depicted in the right side of the figures). Therefore, a material with a ***cubic crystal structure*** has a unit cell in the shape of a ***cube***, and that cubic unit cell is repeated in all directions to fill up the available space (as depicted on the right side of the top figure). On the other hand, a material with a ***hexagonal*** crystal structure has a unit cell in the shape of a ***hexagonal prism*** which is repeated in all directions to fill up the available space (as depicted on the right side of the bottom figure). Therefore, atoms in a hexagonal crystal structure “line up” at positions in space consistent with the repeating hexagonal unit cell, which is ***different*** from how atoms line up for the cubic unit cell, as shown above.

28. Accordingly, in these examples of heteroepitaxy cited in paragraph 25 above where a material with a hexagonal crystal structure is epitaxially grown on a material with a cubic crystal structure (or vice versa), a POSITA would understand that the grown layer is a heteroepitaxial layer, even though the newly grown atoms ***do not*** “line up” as if they are a “continuation” of the original crystal structure. A POSITA would understand that if the atoms line up as a continuation of the original crystal structure, they would have the same crystal structure. Instead, the newly deposited atoms conform to a different crystal structure with lattice sites that differ from the sites of the original crystal structure if it had “continued.”

29. Based on these examples of heteroepitaxial layers described in the art where the new material is grown on a material with a different crystal structure, it is clear that STC’s proposed construction is incorrect. STC’s construction adds a requirement that the “atoms line up as if they are a continuation of the starting crystal structure of the seed area material” which would exclude these layers of material that a POSITA would understand to be a heteroepitaxial layer.

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30. Further, based on my review of the ’400 patent, it is my opinion that the term “heteroepitaxial layer” is also used broadly consistently within the ’400 patent specification, consistent with the ordinary meaning within the art. In particular, the ’400 patent expressly states that “[i]n ***any*** of the embodiments of FIGS. 5 to 9, the seed areas can comprise ***any of the semiconductor materials described*** for seed areas in the present disclosure; and the materials subsequently grown thereon can comprise ***any of the heteroepitaxial grown semiconductors*** described herein.” ’400 patent at 8:24-29. One such material disclosed for the seed area is sapphire. *Id.* at 5:6-13 (“The Nanostructured pedestals 12 are comprised of any suitable material capable of acting as a seed layer for subsequent epitaxial growth… Other suitable materials include … sapphire.”). A heteroepitaxial layer material disclosed is germanium. *Id.* at 6:7-17 (“In an embodiment, the heteroepitaxial layer comprises a Group III-V semiconductor material… The techniques described also apply to semiconductor materials other than III-V materials, such as Ge.”).

31. Therefore, the ’400 patent uses the term heteroepitaxial layer to include an epitaxially grown layer of germanium (having a diamond cubic crystal structure) on sapphire (having a hexagonal crystal structure), even though the germanium atoms do not copy the underlying sapphire crystal structure, or otherwise line up as if they are a continuation of the starting crystal structure, as explained above.

I hereby declare under penalty of perjury that the foregoing is true and accurate to the best of my knowledge.

Executed on December 12, 2019 in Berkeley, California.

Jeffrey Bokor, Ph. D.

EXHIBIT A

Jeffrey Bokor, Ph.D.

Paul R. Gray Distinguished Professor
Chair, EE Division
Associate Chair, EECS Department
University of California
Berkeley, CA 94720

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Expertise

- Electronics
- Nanofabrication
- Nanotechnology
- Device Physics
- Nanomagnetics and Spintronics
- Optics and Optoelectronics
- Laser Technology
- Semiconductor Physics
- Semiconductor Process
- VLSI Technology

Professional Summary
Education

Year	College/University	Degree
1980	Stanford University	Ph.D., Electrical Engineering
1976	Stanford University	MS, Electrical Engineering
1975	Massachusetts Institute of Technology	BS, Electrical Engineering

Employment History

From: 1993 University of California, Department of Electrical Engineering and Computer Science
To: Present Berkeley, CA
Position: Professor

- Department Chair, Department of Electrical Engineering and Computer Sciences, 2019-present
- Chair, EE Division, Associate Department Chair, Department of Electrical Engineering and Computer Sciencse, 2017-2019
- Associate Dean for Research, College of Engineering, 2012-2017
- Joint Appointment: 2008-present , Faculty Senior Scientist, Lawrence Berkeley National Laboratory
- Joint Appointment: 2004-2012, Deputy Director for Science, The Molecular Foundry, Lawrence Berkeley National Laboratory
- Joint Appointment: 1993-2004, Group Leader for Advanced Lithography, Center for X-ray Optics, Lawrence Berkeley National Laboratory

Current research interests:

- Nanomagnetics and spintronics
- Ultrafast laser studies of materials

- Carbon electronics
- Nanophotonics

Classroom teaching:

- Undergraduate and graduate courses in semiconductor physics and technology
- Undergraduate and graduate courses in optical physics and engineering
- Freshman seminar introduction to electrical engineering

From: 1980 AT&T, Bell Laboratories
To: 1993 Holmdel and Murray Hill, NJ

Position:

1990-93 Ultra-Large Scale Integrated Circuits (ULSI) Technology Research Department. Department Head. Murray Hill, NJ Leader of group of 15 Ph.D. scientists, 35 total technical personnel. Responsible for directing research to create technologies relevant to silicon IC manufacturing in the year 2000. Also responsible for continuing improvement and operation of 20,000 sq. ft. Class 100 research cleanroom facility. Experience included:

- ULSI Process integration
- Deep sub-micron silicon MOSFET device physics
- Device and circuit design
- Advanced process and device modeling software
- Advanced lithography

1987-90 Laser Science Research Department. Department Head, Holmdel, NJ. Leader of group of 10 Ph.D. scientists, 20 total technical personnel. Managed diverse program of basic research in optical physics. Conducted high visibility research program, including:

- X-ray lithography
- Nonlinear optics
- Picosecond optoelectronics
- Femtosecond phenomena in electronic materials
- Fiber optics
- Atomic physics

1980-87 Quantum Electronics Research Department. Member of Technical Staff, Holmdel, NJ. Independently directed basic research, including:

- Nonlinear optics
- Picosecond optoelectronics
- Semiconductor device physics
- Ultraviolet laser technology

Major Research Accomplishments (1980-Present)

- Demonstration of spin-transfer-torque magnetic recording (2019)
- Demonstration of 7 nm magnetic memory using scanned probe magnetic tunnel junction readout (2018)

- Experimental demonstration of ultrafast (<10 psec) magnetic switching by pure charge current pulses (2017)
- High performance bottom-up chemically synthesized graphene nanoribbon transistors (2017)
- Experimental demonstration of the ultimate lowest switching energy set by fundamental physics (Landauer's principle) in single-bit operations on nanomagnetic memory bits (2016)
- Demonstration of spin transfer torque switching in sub-10 nm size magnetic tunnel junctions (2016)
- Demonstration of fluid-suspended magnetic particle manipulation using multiferroic magnetic actuation (2015)
- Direct optical detection of current induced spin accumulation in non-magnetic metals (2015)
- Demonstration of sub-nsec signal propagation in nanomagnetic logic (2015)
- Electric field control of magnetic domain walls for manipulation of magnetic particles in microfluidics (2014)
- High performance nanoscale solution processed carbon nanotube transistors (2013)
- Bottom-up chemically synthesized graphene nanoribbon transistors (2013)
- Nanoscale hyperspectral imaging with tapered plasmonic "Campanile" tip (2012)
- Demonstration of nanomagnetic logic signal propagation (2012)
- Demonstration of fundamental thermodynamic limit of energy dissipation in magnetic memory and logic (2011)
- Demonstration of bandgap and sub-band formation in graphene nanomesh superlattice transistors (2010)
- Self-assembly of gold nanoparticle chain structures for nanophotonics using DNA origami (2010)
- Measurement of Schottky contact junction capacitance, doping profiles and carrier mobility in single semiconductor nanowire and carbon nanotube transistors using ultrasensitive C-V measurements (2009)
- Label-free DNA biosensors using functionalized carbon nanotube transistors (2009)
- Directed assembly of nanophotonic device structure using DNA nanotechnology (2009)
- Theory of spin-dependent scattering in silicon MOSFET transistors (2009)
- Proposed new concepts for nanomagnetic logic technology (2008)
- Study of spin-dependent scattering from impurity donors in silicon MOSFETs for use in quantum computing (2007)
- Measurement of spin coherence of antimony donors in silicon near silicon dioxide interfaces (2006)
- First observation of Stark tuning of donor electron spins in silicon, a key step towards implementation of quantum logic in silicon technology (2006)
- First monolithic integrated circuit with both carbon nanotube and silicon MOS transistors (2004)
- Development of a monolithic inkjet printhead array capable of sub-3 μm droplet generation (2004)
- Study of surface and bulk acoustic phonon excitations in superlattices using picosecond ultrasonics (2003)

- Invention and demonstration of “spacer lithography”, a sub-10 nm patterning technology for nano-catalysts and DNA label-free hybridization detection (2003)
- Development of 10 nm gate-length MOSFET devices (2002)
- Demonstration of extreme ultraviolet lensless Fourier transform holography (2001)
- Demonstration of 30 nm lithography using extreme ultraviolet radiation (2001)
- Demonstration of aberration testing and alignment optimization of a commercial prototype four-mirror ring field extreme ultraviolet optical system using at-wavelength interferometry (2000)
- Development of complementary silicide source/drain technology for sub-20 nm MOSFET devices (2000)
- Development of picosecond ultrasonic characterization of Mo/Si extreme ultraviolet multilayer reflectors (1999)
- Development of 17 nm gate-length FinFET devices (1999)
- First demonstration of the “FinFET”, a manufacturable double-gate MOSFET with 25 nm gate-length (1998)
- Development of at-wavelength defect detection metrology for extreme ultraviolet lithography (1998)
- Co-invention and demonstration of the phase-shifting, point diffraction interferometer, and application to high-accuracy wavefront metrology of extreme ultraviolet lithography optics (1996)
- First demonstration of working MOS devices fabricated with extreme ultraviolet lithography (1996)
- Direct, quantitative measurement of saturation velocity and overshoot velocity in MOS inversion layers (1994)
- Demonstration of interferometry at extreme ultraviolet wavelengths for characterization of lithography optics (1994)
- First direct observation of non-thermal energy distributions and thermalization dynamics in laser-excited metal films (1992)
- Development of 89 GHz f T Si MOSFET transistors with 0.15 mm channel length (1992)
- First feasibility demonstration of diffraction-limited extreme ultraviolet projection lithography (1990)
- First direct observation of surface state kinetics during semiconductor surface recombination (1989)
- Invention and demonstration of the coplanar vacuum photodiode, an ultrafast, high sensitivity photodetector for the visible and ultraviolet (1987)
- First demonstration of time-resolved photoemission for measurement of picosecond electronic signals in integrated circuits (1986)
- First direct detection of band-gap states at GaAs Schottky barrier interfaces (1986)
- Application of time-resolved photoemission to the first measurement of picosecond electron dynamics on InP, GaAs, and Si surfaces (1985)
- Invention and demonstration of picosecond time-resolved ultraviolet photoemission spectroscopy for the study of electron dynamics at semiconductor surfaces (1985)
- Development of a source of 35.5 nm coherent radiation by seventh harmonic generation in a pulsed jet. At the time, this was the shortest wavelength source of coherent radiation yet demonstrated (1983)

- Invention of the pulsed jet harmonic generator for the production of extreme ultraviolet coherent radiation (1983)
- First picosecond pulse krypton-fluoride excimer laser (1982)
- First demonstration of an autoionization pumped laser (1982)
- First third harmonic generation using an excimer laser (1980)
- Development of the first tunable, single-mode excimer laser system (1980)

Technical Consulting

From:	2001	Rodel, Inc.
To:	2002	Newark, DE
	Position:	Technical advisory board member for extreme ultraviolet lithography

From:	2002	Alpha Golf, Inc.
To:	2002	Kensington, CA
	Position:	Technical consultant

From:	2002	University Technology Ventures, Inc.
To:	present	Pleasanton, CA
	Position:	Technical consultant

From:	2002	Veeco Metrology Group
To:	2006	Santa Barbara, CA
	Position:	Technical advisory board member

Litigation Support

Consulting and expert witness on patent validity and infringement in 30+ cases since 1998. Equipment inspections. Testimonial experience at deposition and trial. Full list available on request.

Patents

1. Yang Yang, Jon Gorchon, Richard Wilson, Charles-Henri Lambert, Sayeef Salahuddin, Jeffrey Bokor, "Writing of a magnetic memory with electric pulses," US 10,388,349 B2, August 2019.
2. Thomas Schenkel, Cheuk Chi LO, Christoph Weis, Stephen Lyon, Alexei Tyryshkin, Jeffrey Bokor, "Scalable quantum computer architecture with coupled donor-quantum dot qubits," US 8,816,325 B2, August 2014
3. Brian Lambson, Zheng Gu, David Carlton, Jeffrey Bokor, "Concave nanomagnets with widely tunable anisotropy," US 8,766,754 B2, July 2014
4. Ji Zhu, Jeff Grunes, Yang-Kyu Choi, Jeffrey Bokor, Gabor Somorjai, "Methods for Fabrication of Positional and Compositionally Controlled Nanostructures on Substrate," US 8,486,287 B2, July 2013

5. Jeffrey Bokor, Nathan C. Emley, David Carlton, "Nanomagnetic signal propagation and logic gates," US 8,134,441 B1, March, 2012
6. David Carlton, Nathan C. Emley, Jeffrey Bokor, "Nanomagnetic Register," US 8,138,874 B1, March, 2012
7. Jeffrey Bokor, Patrick Naulleau, "System For Interferometric Distortion Measurements That Define An Optical Path," US 6,559,952 B1, May, 2003
8. Jeffrey Bokor, Yun Lin, "Method And Apparatus For Inspecting Reflection Masks For Defects," US 6,555,828 B1, April, 2003
9. Jeffrey Bokor, Seongtae Jeong, "Multi-Level Scanning Method for Defect Inspection," US 6,484,306 B1, November 2002
10. Chenming Hu, Tsu-Jae King, Vivek Subramanian, Leland Chang, Xuejue Huang, Yang-Kyu Choi, Jakub Tadeusz Kedzierski, Nick Lindert, Jeffrey Bokor, Wen-Chin Lee, "FINFET Transistor Structures having a Double Gate Channel Extending Vertically From a Substrate and Methods of Manufacture," US 6,413,802 B1, July 2002
11. Jeffrey Bokor, Anthony M. Johnson, "High Speed Photodetector Having Dual Transmission Line Geometry," US 4,933,542 A, June 1990
12. Jeffrey Bokor, Anthony M. Johnson, Ralph H. Storz, "High Speed Circuit Measurements Using Photoemission Sampling," US 4,721,910 A, January, 1988

Professional Associations, Service, and Awards

- Fellow, Optical Society of America
- Fellow, American Physical Society
- Fellow, Institute of Electronics and Electrical Engineers
- Senior Scientist, Lawrence Berkeley National Laboratory
- American Association for the Advancement of Science
- Paul R. Gray Distinguished Professorship in Electrical Engineering and Computer Sciences, 2015-present
- National Semiconductor Distinguished Professorship in Engineering, University of California, 2007-2015
- Deputy Director, Center for Energy Efficient Electronic Science, an NSF Science and Technology Center headquartered at Berkeley, 2010-present.
- Co-Chair, 5th Berkeley Symposium on Energy Efficient Electronic Systems, 2017
- Co-Chair, 4th Berkeley Symposium on Energy Efficient Electronic Systems, 2015
- Co-Chair, 3rd Berkeley Symposium on Energy Efficient Electronic Systems, 2013
- Co-Chair, 2nd Berkeley Symposium on Energy Efficient Electronic Systems, 2011
- Co-Chair, 1st Berkeley Symposium on Energy Efficient Electronic Systems, 2009
- Scientific Advisory Board, Catalan Institute for Nanoscience (ICN), Autonomous University of Barcelona, 2007-present
- Scientific Advisory Committee, Advanced Light Source, Lawrence Berkeley National Laboratory, 2006-2010
- IEEE Paul Rappaport Award for best paper of the year published in Electron Device Society journals, 2002
- DARPA Most Significant Technical Accomplishment Award, 2000
- Program Committee, CMOS devices, International Electron Devices Meeting, 1999-2000

- Scientific Advisory Committee, Advanced Light Source, Lawrence Berkeley National Laboratory, 1998-2002
- Technical Advisory Committee, Laser Science and Technology Program, Lawrence Livermore National Laboratory, 1996-1997
- General Co-chair, Quantum Electronics and Laser Science Conference, Baltimore, MD, 1997
- Program Committee, Topical Meeting on Extreme Ultraviolet Lithography, Boston, MA, 1996
- Users Executive Committee, Advanced Light Source, Lawrence Berkeley National Laboratory, 1994-1998
- Program Co-chair, Quantum Electronics and Laser Science Conference, Baltimore, MD, 1995
- Technical Council, Optical Society of America, 1991-1994
- Chairman, Technical Group on X-ray and XUV Physics, Optical Society of America, 1991-1994
- Program Committee, Topical Meeting on Soft X-ray Projection Lithography, Monterey, CA, April, 1992
- Cochairman, Topical Meeting on Soft X-ray Projection Lithography, Monterey, CA, April, 1991
- Cochairman, Topical Meeting on Short Wavelength Coherent Radiation, Generation and Applications, Monterey, CA, March, 1986
- Program Committee, Conference on Lasers and Electro-Optics (CLEO) ‘84, Anaheim, CA, June, 1984
- Program Committee, Topical Meeting on Laser Techniques in the Extreme Ultraviolet, Boulder, CO, March, 1984
- Program Committee, Topical Meeting on Excimer Lasers, Lake Tahoe, NV, January, 1983
- Program Committee, Topical Meeting on Laser Techniques for Extreme Ultraviolet Spectroscopy, Boulder, CO, March 1982

Publications

1. J. Hong, X. Li, O. Lee, W. Tian, S. Khizroev, J. Bokor, and L. You, "Demonstration of spin transfer torque (STT) magnetic recording," Appl. Phys. Lett., vol. 114, p. 243101, 2019.
2. B. Navarrete, M. Stone, P. Wang, R. Guduru, K. Luongo, A. Hadjikhani, D. Toledo, Y. Emirov, B. Arkook, P. Liang, J. Hong, J. Bokor, and S. Khizroev, "Nanomagnetic Particle-Based Information Processing," IEEE Trans. Nanotechnol., vol. 18, pp. 983-988, 2019.
3. G. Pitner, G. Hills, J. P. Llinas, K. M. Persson, R. Park, J. Bokor, S. Mitra, and H. P. Wong, "Low-Temperature Side Contact to Carbon Nanotube Transistors: Resistance Distributions Down to 10 nm Contact Length," Nano Lett, vol. 19, no. 2, pp. 1083-1089, Feb 13 2019.
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